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; Sequence 9, Application US/09646561
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Ke
; APPLICANT: Yang, Shumin
; APPLICANT: Sellins, Karen S.
; TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY
; FILE REFERENCE: IM-1-CL-PCT
; CURRENT APPLICATION NUMBER: US/09/646,561
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/078,765
; PRIOR FILING DATE: 1998-03-19
; PRIOR APPLICATION NUMBER: 09/062,597
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 9
; LENGTH: 987
; TYPE: DNA
; ORGANISM: Canis familiaris
atgatactcagatgacatggaactggaataacattctcttctgtatgacccctcctctatg
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atctcaaaacataaagcttgatggattggttaattgttggcagcagcagatgaagctgtctg
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; Sequence 19, Application US/09646561
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Ke
; APPLICANT: Yang, Shumin
; APPLICANT: Sellins, Karen S.
; TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY
; FILE REFERENCE: IM-1-CL-PCT
; CURRENT APPLICATION NUMBER: US/09/646,561
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/078,765
; PRIOR FILING DATE: 1998-03-19
; PRIOR APPLICATION NUMBER: 09/062,597
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 19
; LENGTH: 840
; TYPE: DNA
; ORGANISM: Canis familiaris
atgatactcagatgacatggaactggaataacattctcttctgtatgacccctcctctatg
tgctgtctccatgaagatcaagcatatttcaacaagactggagaaactggcaccatttaca
atctcaaaacataaagcttgatggattggttaattgttggcagcagcagatgaagctgtctg
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cttggaaagaacattggacctcgtgacccatcaatattcagatcaagacaaggcgtgtatc
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; Sequence 28, Application US/09646561
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Sellins, Karen S.
; TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY PROTEINS, NUCLEIC
; FILE REFERENCE: IM-1-CI-PCT
; CURRENT APPLICATION NUMBER: US/09/646,561
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/078,765
; PRIOR FILING DATE: 1998-03-19
; PRIOR APPLICATION NUMBER: 09/062,597
; PRIOR FILING DATE: 1998-04-17
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 28
; LENGTH: 996
; TYPE: DNA
; ORGANISM: Felis catus
; FEATURE:
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caactctcaaacataagcctggagagctggtagtatatttggcaggaccagataagctggtt
ctgatgatatctcagggcaaggaacccctcaaatgctcctccaataataagggccgtac
aagcttggacaaggacaactggaccctggagactccaatgttcagatcaaggacaaggccacat
atcactgtttcattataaagggccaaaggactagttcccatgcaccaaatgagttctgac
ctatcagctgttgcctaacctcagtcacactgaaataacacgttaactctaatagaacagaaattc
tggcatcataaatttgactctgctcactatcaagggttaccagacccctaaaggagatgtatttc
acgaactgtcacacacgtttctctacagcttgccttttttctcgtccctgaagcacacaaatgaatg
cttttggccctgaactggagacactggagatgctgctcctcctactcttcaatatagatgac
aacctaaaggataaaagccctgaacaggccactctcctggattggcgttgccttgtaattgtt
gttgttttttgggggtgtgctctttaaactaaggaaaggaaggaagcagcagcctggccc
ctctcatgaatgtgaaacatcaaaaggagagaaagagacaaacagacccaagaaagatc
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; Sequence 30, Application US/09646561
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Sellins, Karen S.
; TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY PROTEINS, NUCLEIC
; FILE REFERENCE: IM-1-CI-PCT
; CURRENT APPLICATION NUMBER: US/09/646,561
; CURRENT FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/078,765
; PRIOR FILING DATE: 1998-03-19
; PRIOR APPLICATION NUMBER: 09/062,597
; PRIOR FILING DATE: 1998-04-17
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30
; LENGTH: 509
; TYPE: DNA
; ORGANISM: Felis catus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(507)
US-09-646-561-30
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gtatgactctgtcatgagaatactcaaaataatgtgacagaactgtacaagtttctatcagct
tgccttttcagtcctcgaagcacaaatgtagcgtcttttggccctgaaactggagacactg
gagatgtctctccctacacttcaatagatgcacaacctaaagataaagacctgaacaaagg
ccactctctggatggcgtgactgttaattgtttgttttgggatggtgtccttta
aaactaagaaaaaggaagaagcagcgtgccccctctcatgaatgtgaaacctcaaaagg
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; Sequence 33, Application US/09646561
; GENERAL INFORMATION:
; APPLICANT: Yang, Gek-Ke
; APPLICANT: Yang, Shumin
; APPLICANT: Sellins, Karen S.
; TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-1-C1-PCT
; CURRENT APPLICATION NUMBER: US/09/646,561
; CURRENT FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 60/078,765
; PRIOR FILING DATE: 1998-03-19
; PRIOR APPLICATION NUMBER: 09/062,597
; PRIOR FILING DATE: 1998-04-17
; NUMBER OF SEQ ID NOS: 65
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 33
; LENGTH: 359
; TYPE: DNA
; ORGANISM: Felis catus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(357)
US-09-646-561-33
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gagatgcgcctccctacccttcaatcatagaaacacaaagggaagagaagaagacaaca
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tgaagacagcctcagcgacaaagtlactaacacal

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3. US-09-303-040-5 (1-1080)  
US-09-646-561-19 Sequence 19, Application US/09646561

Sequence 19, Application US/09646561  
GENERAL INFORMATION:

APPLICANT: Sim, Gek-Ke  
APPLICANT: Yang, Shunmin  
APPLICANT: Sellins, Karen S.  
TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY PROTEINS, NUCLEIC  
FILE REFERENCE: IM-1-C1-PCF  
CURRENT APPLICATION NUMBER: US/09/646,561  
PRIOR FILING DATE: 2000-09-19  
PRIOR APPLICATION NUMBER: 60/078,765  
PRIOR FILING DATE: 1998-03-19  
PRIOR APPLICATION NUMBER: 09/062,597  
PRIOR FILING DATE: 1998-04-17  
NUMBER OF SEQ ID NOS: 65  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 19

LENGTH: 840

TYPE: DNA

ORGANISM: Canis familiaris

Initial Score = 625 Optimized Score = 691 Significance = 0.07  
Residue Identity = 82% Matches = 707 Mismatches = 126  
Gaps = 23 Conservative Substitutions = 0

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AT--GTATCT
X
GTGACAGCACTATGGAGCTTGTACACATCTCTTGTGATGGCCCTCTGCTCTCTGTGGTGTCTTTCATGA
80      90      100     110     120     130     140
CAGA-TGCACTATGGAACTGATTAACATCTCTTGTGATGACCCCTCTCTATGATGCTGCTTCATGA
10     20     30     40     50     60     70
150     160     170     180     190     200     210

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220     230     240     250     260     270     280
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160     170     180     190     200     210     220
ATGAGTGTGATATTTTGGCAGAGCCAGAGATTAAGCTGTTCTGTATGAGATTTTCAAGGCAAGAACCC
290     300     310     320     330     340     350
CTCAAAATTTTATCTCAAAATTTTAAAGGCGGTGACCTTTGACAGAGCACTGACCTTGAAGCTCACA
230     240     250     260     270     280     290
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370     380     390     400     410     420     430
ATGTTTCAAGTCAAGGCAAGGCGGTGACCTTTGACAGAGCACTGACCTTGAAGCTCACA
300     310     320     330     340     350     360
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440     450     460     470     480     490     500
TGACACCAATGAGTCTGACCTTATCAGGCTTGTGACCTTGAAGCTCACA
510     520     530     540     550     560     570
GAAAGCAAAATTTCTGACCTTATCAGGCTTGTGACCTTGAAGCTCACA
580     590     600     610     620     630     640
ATTTCAGCTTAACTGAGATTTTCAAGGCTTGTGACCTTGAAGCTCACA
650     660     670     680     690     700     710
ATTTCAGCTTAACTGAGATTTTCAAGGCTTGTGACCTTGAAGCTCACA
720     730     740     750     760     770     780
CAGAACTGACAACTGAGATTTTCAAGGCTTGTGACCTTGAAGCTCACA
790     800     810     820     830     840
CCCTGAACTGAGATTTTCAAGGCTTGTGACCTTGAAGCTCACA
850     860     870     880     890     900     910
AAGACCTTGAAGGCAAGGCTTGTGACCTTGAAGCTCACA
920     930     940     950     960     970     980
AAGAACTGAGG-AAGCA-----AGAAAGGAGTACGTTACCAAGAAAGG-AAGAACTGAGGAGGCC
990     1000     1010     1020     1030     1040     1050
GAGTGTCTTTTAAACATTAAGGAAAGAGAAAG-AAGCA--CTTGAGGCTTGTGATGATGAAACCATC
1060     1070     1080
AGGTG-TGTAACATTTGAGAGAGAGGCTTCAAGGCGCAACAGTACTACAGCATTTT
1090     1100     1110     1120     1130     1140     1150
GCCCAGTGTGTAACATTTGAGAGAGAGGCTTCAAGGCGCAACAGTACTACAGCATTTT
1160     1170     1180     1190     1200     1210     1220
TGACAAAT
1230     1240     1250     1260     1270     1280     1290

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3. US-09-303-510-5 (1-1080)  
US-09-646-561-19 Sequence 19, Application US/09646561

Sequence 19 Application US/039646561  
GENERAL INFORMATION:  
APPLICANT: Sim, Gek-Kee  
APPLICANT: Yang, Shumin  
APPLICANT: Sellins, Karen S.  
TITLE OF INVENTION: NOVEL FORMS OF T CELL COSTIMULATORY  
PROTEINS, NUCLEIC  
ACID MOLECULES, AND USES THEREOF  
FILE REFERENCE: IM-1-CI-PCT  
CURRENT APPLICATION NUMBER: US/09/646,561  
CURRENT FILING DATE: 2000-09-19  
PRIOR APPLICATION NUMBER: 60/078,765  
PRIOR FILING DATE: 1998-03-19  
PRIOR APPLICATION NUMBER: 09/062,597  
PRIOR FILING DATE: 1998-04-17  
NUMBER OF SEQ ID NOS: 65  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 19

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ORGANISM: Canis familiaris
Initial Score = 625 Optimized Score = 691 Significance = 0.07
Residue Identity = 82% Matches = 707 Mismatches = 126
Gaps = 23 Conservative Substitutions = 0

```

GTTCTCTGTCTCTCGGGAATGCTACTAGCTTATTCATCTGTCCTCTGGAGCTGAGTGAATGGCCATT  
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 GTTACAGCACTATAGGACCTGAGTACACATCTCTCTGTGATGAGCCCTCTGCTCTCTGATTTCTTCATGA  
 80 90 100 110 120 130 140  
 CAGA-TGCACTATGAGACTGATTAATCATCTCTGTGAGACCCCTCCTCTATAGTGCTGCTTCATATA  
 150 160 170 180 190 200 210  
 AT--GTCTCT X

AAGGCAAGCATATTTCACCAACAACCTGGGAACCTCCAGTGCATTTTACAACTCCAAAACATTAAGCTCTG  
 AAGAGTCAGCATTTTCCAAAGACCTGGGAACCTCCAGTGCATTTTACAACTCCAAAACATTAAGCTCTG  
 80 90 100 110 120 130 140 150  
 220 230 240 250 260 270 280  
 ATGACCTGGTAGTATTTTGGCAGACGACGAAATTAACCTGGTTCCTGTATGATATTTACGAGGGAAGAACCC  
 ATGAGTGGTGGTGTATTGGCAGGACGAGATTAACCTGGTTCCTGTATGATATTTACGAGGGAAGAACCC  
 160 170 180 190 200 210 220  
 290 300 310 320 330 340 350 360  
 CTCGAAATGTCATCTCAATATTAAGGGCCGTACAAGTTTGAACAAGACAATGGACCTTGAAGCTCCACA  
 CTCGAAATGTCATCTCAATATTAAGGGCCGTACAAGTTTGAACAAGACAATGGACCTTGAAGCTCCACA  
 240 250 260 270 280 290  
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 ATATTCATATTAAGGAACAAGGACATATCACTGTTTCATTTATTAATTAAGGGCCCAAGAGACTGTGTCACA  
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 440 450 460 470 480 490 500  
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 370 380 390 400 410 420 430  
 510 520 530 540 550 560 570  
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 440 450 460 470 480 490 500 510  
 580 590 600 610 620 630 640  
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 AATTTTGTGTAACCAAGCAATTCAGATTAAGTAACTGATGATGAAATATCTCAATTAATGATGA  
 590 600 610 620 630 640 650  
 650 660 670 680 690 700 710 720  
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 660 670 680 690 700 710 720  
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 CAAAGCTCTCAAGATTTCTATAGCTTGTCTTCGACCTCCGAGACACAAATGATGAGCTTTTGAGT  
 590 600 610 620 630 640 650  
 730 740 750 760 770 780  
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 CCTGTAACCTGAGACACTGAGATCTGCTCTCCCTCACTTCAATATATGATGC--ACAACCT--AAGGATTA  
 730 740 750 760 770 780  
 TCTCTCAACTTGAATCAAT---GAACTCTCTCTCTCTTAAATATATGAAACAACAAGATGAGAGAA  
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 790 800 810 820 830 840 850  
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 860 870 880 890 900 X 920  
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 1010 1020 1030 1040 1050 1060 1070  
 TGCACAT  
 1080

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